

STAAR Alternate 2 Spring 2020 Grade 4 Mathematics Essence Statements

| STAAR Reporting Category 1 | STAAR Reporting Category 2 | STAAR Reporting Category 3 | STAAR Reporting Category 4 |
|---|---|---|--|
| Numerical Representations and Relationships: The student will demonstrate an understanding of how to represent and manipulate numbers and expressions. | Computations and Algebraic Relationships: The student will demonstrate an understanding of how to perform operations and represent algebraic relationships. | Geometry and Measurement: The student will demonstrate an understanding of how to represent and apply geometry and measurement concepts. | Data Analysis and Personal Financial Literacy: The student will demonstrate an understanding of how to represent and analyze data and how to describe and apply personal financial concepts. |
| Knowledge and Skills Statement (4.2) Number and operations. The student applies mathematical process standards to represent, compare, and order whole numbers and decimals and understand relationships related to place value. (Readiness and Supporting Standard) Essence Statement Uses number relationships to demonstrate an understanding of place value. <hr/> Knowledge and Skills Statement (4.3) Number and operations. The student applies mathematical process standards to represent and generate fractions to solve problems. (Readiness and Supporting Standard) Essence Statement Models and finds relationships among fractional units. | Knowledge and Skills Statement (4.4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations and decimal sums and differences in order to solve problems with efficiency and accuracy. (Readiness and Supporting Standard) Essence Statement Solves problems using operations involving whole numbers or decimals. Knowledge and Skills Statement (4.5) Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations. (Readiness Standard) Essence Statement Models or solves problems involving whole number relationships. | Knowledge and Skills Statement (4.5) Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations. (Readiness Standard) Essence Statement Solves problems involving perimeter or area of rectangles. <hr/> Knowledge and Skills Statement (4.6) Geometry and measurement. The student applies mathematical process standards to analyze geometric attributes in order to develop generalizations about their properties. (Readiness and Supporting Standard) Essence Statement Identifies one- and two-dimensional geometric figures using attributes. | Knowledge and Skills Statement (4.9) Data analysis. The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. (Readiness and Supporting Standard) Essence Statement Uses graphs to organize and interpret data. <hr/> Knowledge and Skills Statement (4.10) Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. (Supporting Standard) Essence Statement Recognizes how money can be obtained, spent, and used to make a profit. |

**Knowledge and Skills
Statement**

**(4.7) Geometry and
measurement.** The student
applies mathematical process
standards to solve problems
involving angles less than or
equal to 180 degrees. (Readiness
and Supporting Standard)

Essence Statement

Find the measures of angles.

**Knowledge and Skills
Statement**

**(4.8) Geometry and
measurement.** The student
applies mathematical process
standards to select appropriate
customary and metric units,
strategies, and tools to solve
problems involving measurement.
(Readiness and Supporting
Standard)

Essence Statement

Solves problems involving length,
time, liquid volume, mass/weight,
or money.